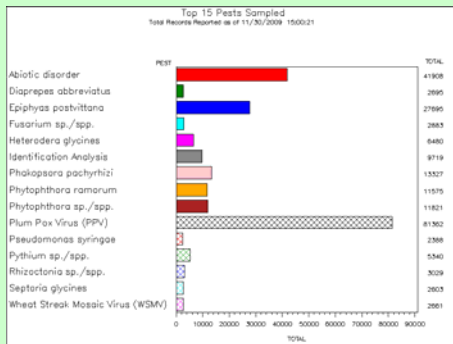


Carla Thomas *, Andrew Coggeshall, Richard Bostock, WPDN, University of California, Davis, CA; Eileen Luke, Mike Hill, CERIS, Tom Creswell, Purdue University, West Lafayette, IN; Casey Estep, CDFA, Sacramento, CA, David D. Barber, U of G, Athens, GA, Leonard Coop, Paul Jepson, OSU, Corvallis, OR, Howard Beck, U of FL, Gainesville, FL, Forrest Nutter, Iowa State University, Ames, IA, Laurence Madden, OSU, Wooster, OH.

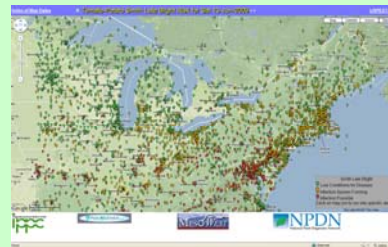
For five years, the NPDN (National Plant Diagnostic Network) has been collecting data on diagnostic results from member laboratories with over 430,000 records in the NPDN National Repository maintained by CERIS (Center for Environmental and Regulatory Information Systems) at Purdue University. The NPDN has initiated analytics of the NPDN National Repository Data. Several tools have been developed and are available for data analysts and diagnosticians to use. These tools include maps of diagnostic results with degree day layers, highway and waterway overlays, charts, and summary reports. The NPDN has also launched a 'First Submission Report' which lists pests, weeds and diseases that have been submitted for the first time in each state into the NPDN repository.

As a pilot program, the Great Plains Diagnostic Network obtained permission from the State Department of Agriculture State Plant Regulatory Officials (SPRO's) to share wheat virus data among member states. This allowed GPDN members, including SPRO's and State Plant Health Directors (SPHD's), to see the results of a regional analysis of a GPDN wheat virus survey across states, without disclosing personally identifiable nor market sensitive information. The completion of the NPDN Data Access Policy has greatly facilitated this effort.

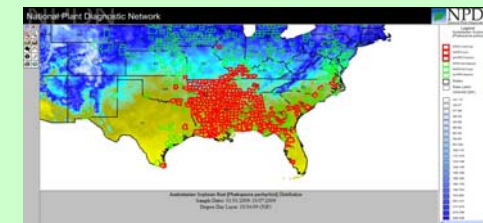
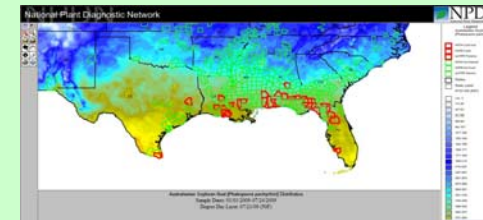
<http://ceris.purdue.edu/npdn/>



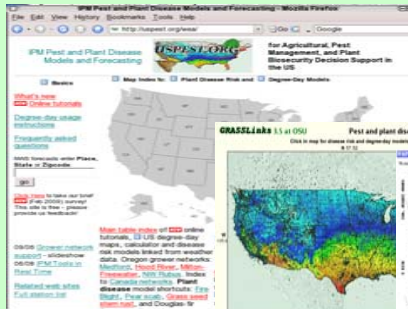
Some species have enough records to conduct studies of spread and occurrence.



The late blight disease model was mapped forensically to demonstrate the high disease pressure this year.

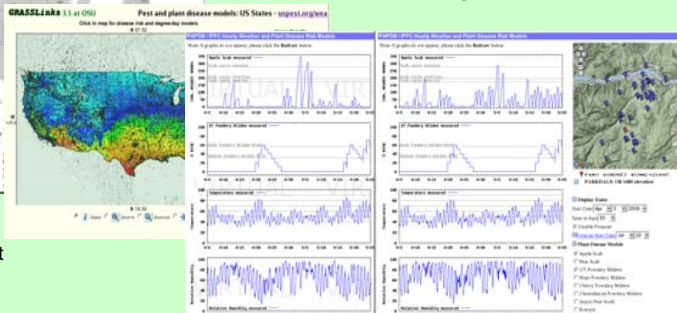


Soybean rust has not been observed on soybean when degree days are less than 3000 dd base 50 F.



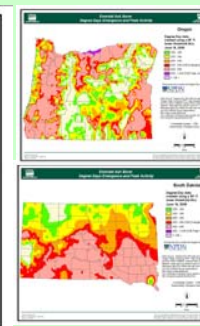
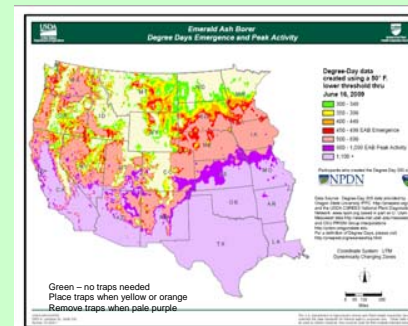
<http://uspest.org/wea>

Funded by NPDN, IPM Programs and CSREES competitive grants.



Linked to over 75 pest and disease models and generic modeling tools.

Plant Disease risk model interface with multiple models (12 currently available), using virtual (left) and actual (right) weather data.



USDA APHIS CAPS Survey programs leveraged existing NPDN degree day layers to generate maps. These maps were used to time the placement and removal of insect traps, saving materials and labor by avoiding trapping when insects were not present.